Claims

What is claimed is:

1.A method for setting an initial hyper frame number (HFN) for a new radio bearer in a wireless communication system, the wireless communication system comprising:

a mobile unit maintaining a status variable capable of assuming a NOT STARTED state indicating that 17187852a17187852CarlosCarlosLee17187852According to the claim language, an indefinite article "a" or "an" is used to describe a new element first mentioned in the claims. ciphering is not to be performed along the new radio bearer, and a STARTED state that indicates that the ciphering is to be performed along the new radio bearer;

a 17188053universal terrestrial radio access network17188053CarlosCarlosLee17188053Using a lowercase title in the claim is better. (UTRAN) for transmitting a first control command to the mobile unit, the first control command used for triggering establishment of the new radio bearer between the mobile unit and the UTRAN; and

a plurality of established radio bearers, each established radio bearer between the mobile unit and the UTRAN having a corresponding first HFN;

the method comprising:

the UTRAN sending the first control command to the mobile unit to establish the new radio bearer;

in response to receiving the first control command, the mobile unit generating a first value based on the first HFNs of the established radio bearers, the first value being at least as great as the x most significant bits (MSB_x) of each first HFN; and

in response to receiving the first control command, the mobile unit setting the MSB_x of the initial HFN of the new radio bearer equal to the first value while the status variable is set to the NOT STARTED state.

[c2]

2.The method of claim 1 wherein the UTRAN is further used for transmitting a second control command to change the status variable to trigger the ciphering upon each radio bearer between the UTRAN and the mobile unit, and the first control command is transmitted from the UTRAN to the mobile unit prior to the

second control command.

[c3]   3. A method for setting an initial hyper frame number (HFN) for a new radio bearer in a wireless communication system, the wireless communication system comprising:

a mobile unit maintaining a status variable capable of assuming a NOT STARTED state indicating that the ciphering is not to be performed along the new radio bearer, and a STARTED state that indicates that 17188184a 17188184CarlosCarlosLee17188184The same reason described in comment 1.ciphering is to be performed along the new radio bearer; and

a 17188392universal terrestrial radio access network (UTRAN) 17188392CarlosCarlosLee17188392Claim 3 is independent of claim 1. Therefore, describe the element "UTRAN" in the claim 3 again. for transmitting a first control command to the mobile unit, the first control command used for triggering establishment of the newradio bearer between the mobile unit and the UTRAN;

the method comprising:

the UTRAN sending the first control command to the mobile unit to establish the new radio bearer;

in response to receiving the first control command, the mobile unit generating a first value based on a reference value, the first value being at least as great as the x most significant bits (MSB_x) of an initial HFN of the new radio bearer; and

in response to receiving the first control command, the mobile unit setting the MSB_x of the initial HFN of the new radio bearer equal to the first value while the status variable is set to the NOT STARTED state.

[c4]   4.The method of claim 3 wherein the reference value is stored in a non-volatile memory positioned on the mobile unit.

[c5]   5.The method of claim 4 wherein the non-volatile memory is a SIM card.

[c6]   6. The method of claim 3 wherein the UTRAN is further used for transmitting a second control command to change the status variable to trigger the ciphering upon each radio bearer between the UTRAN and the mobile unit, and the first control command is transmitted from the UTRAN to the mobile unit prior to the

second control command.